SUMMARY

Targeting of the Cervical Screening Program Based on Maximum Supply Calculation and Potential Demand (Study in Lumajang District)

Cancer is one of the leading causes of death worldwide. Based on Basic Health Research data (Riskesdas) in 2013, the prevalence of tumor or cancer in Indonesia was 1.4 every 1,000 populations. The highest prevalence of cancer was found in Yogyakarta (4.1 ‰), Central Java (2.1 ‰), Bali (2 ‰), Bengkulu and Jakarta (1.9 ‰). The number of cervical cancer patients on East Java in 2013 was 1.1 ‰ or 21,313 women.

Percentage of women aged 30-59 years old who had done cervical examination as an early detection of cervical cancer were relatively low. In 2015 there weren't any districts or cities in East Java that achieved the target of cervical examination. In 2016 only two districts or cities achieved the target of 10% in one year. Between years 2015 - 2017, Primary Health Care in Lumajang District hadn't achieved the target of cervical examination. Lumajang District hadn't achieved the target could be caused by the target setting didn't in accordance with the ability of the organization and conditions in the community. Some researchs need to be done to determine the correct targeting. If the specified target is incorrect it could affect the performance of the organization. Target setting should consider organizational capabilities and program target conditions.

The purpose of this research was to give recommendation about target setting formula on cervical screening program based on calculation of maximum supply and potential demand in Lumajang District. The objectives of the study were; 1) To calculate the maximum supply (patient capacity) of the Primary Health Care (Puskesmas) based on the availability of the health officer, the skills of the health officer, the infrastructure, and the time of service on conducting the cervical screening; 2) To calculate the potential demand based on the population, high risk prevalence (wedding history, smoking history, genetic history, use of contraceptives, and personal hygiene) and high risk's priority of cervical cancer (knowledge, perception, family support, environmental support, cervical examination needs, desires, JKN insurance membership, willingness to pay, visitation time to Primary Health Care, availability of transportation, and choice of health care facilities); 3) To analyze the ratio of maximum supply (patient capacity) to potential demand of cervical examination; 4) To formulate the target setting formula for cervical screening program.

This research was a descriptive observational approach with cross sectional research design. The research analysis unit was the district. The source of information in this study were the head of the Primary Health Care, midwife who performs cervical examination and 250 women aged 30-59 years old who had been married.

The results showed that 1) The number of real maximum supply in one year were 17,061 patients, maximum potential supply in one year were 22,162 patients and the maximum supply of standard in one year were 62,715 patients. 2) The number of potential demand were divided into three, in to the high risk groups that consist of 144,783 women, the middle risk groups that consist of 3,913 women and the low risk groups that consist of 95,870 women 3) The comparison result between maximum supply and potential demand shows that the number of potential demand for high risk groups were bigger than the number of real maximum and potential supply. Maximum supply were smaller than potential demand after priority was used on high risk group 4) The target setting formula set based on some criterias as follows if 80% of supply maximum > potential demand, the targeted one was potential demand, if 80% of supply maximum $\leq$ potential demand, the targeted one was the 80% of supply maximum or potential demand.

RINGKASAN

Penetapan Target Program Pemeriksaan Leher Rahim Berdasarkan Perhitungan *Supply* Maksimal dan *Potential Demand* (Studi di Kabupaten Lumajang)

Penyakit kanker merupakan salah satu penyebab kematian utama di seluruh dunia. Berdasarkan data Riset Kesehatan Dasar (Riskesdas) tahun 2013, prevalensi tumor/kanker di Indonesia adalah 1,4 per 1.000 penduduk. Prevalensi kanker tertinggi terdapat di DI Yogyakarta (4,1‰), Jawa Tengah (2,1‰), Bali (2‰), Bengkulu dan DKI Jakarta sebesar 1,9‰. Jumlah penderita kanker serviks di Provinsi Jawa Timur tahun 2013 sebesar 1,1‰ atau 21.313 wanita.

Pada tahun 2015 belum ada kabupaten/ kota di Jawa Timur yang mencapai target pemeriksaan leher rahim. Tahun 2016 hanya dua kabupaten/ kota yang mencapai target 10% dalam satu tahun. Antara tahun 2015–2017, Puskesmas di Kabupaten Lumajang belum ada yang mencapai target pemeriksaan leher rahim. Tidak tercapainya target dapat disebabkan target yang ditetapkan tidak sesuai dengan kemampuan organisasi dan kondisi di masyarakat. Perlu dilakukan penelitian untuk mengetahui penetapan target yang benar. Jika target yang ditetapkan salah dapat mempengaruhi kinerja organisasi. Penetapan target harus melihat kemampuan organisasi dan kondisi sasaran program.

Tujuan penelitian ini adalah memberikan rekomendasi formula penetapan target pada program pemeriksaan leher rahim berdasarkan perhitungan *supply* maksimal dan *potential demand* di Kabupaten Lumajang. Tujuan penelitian adalah 1) menghitung *supply* maksimal Puskesmas berdasarkan ketersediaan petugas, keterampilan petugas, sarana prasarana dan waktu pelayanan dalam melakukan pemeriksaan leher rahim 2) menghitung *potential demand* berdasarkan jumlah penduduk, prevalensi *high risk* (riwayat pernikahan, riwayat melahirkan, riwayat merokok, riwayat genetik, pemakaian alat kontrasepsi, dan *personal hygiene)* dan prioritas *high risk* kanker serviks (pengetahuan, persepsi, dukungan keluarga, dukungan lingkungan sekitar, kebutuhan dan keinginan pemeriksaan leher rahim, kepesertaan JKN, *willingness to pay*, waktu kunjungan ke Puskesmas, ketersediaan transportasi dan pilihan fasilitas pelayanan kesehatan) 3) menganalisis perbandingan jumlah *supply* maksimal dengan *potential demand* pemeriksaan leher rahim 4) menyusun formula penetapan target program pemeriksaan leher rahim.

Penelitian ini adalah penelitian dengan pendekatan deskriptif observasional dengan rancangan penelitian *cross sectional*. Unit analisis penelitian adalah kabupaten. Sumber informasi dalam penelitian ini adalan kepala Puskesmas, bidan pelaksana pemeriksaan leher rahim dan 250 wanita usia 30-59 tahun yang sudah pernah menikah.

Hasil penelitian menunjukkan bahwa 1) Jumlah *supply* maksimal riil dalam setahun sebanyak 17.061 pasien, *supply* maksimal potensial dalam setahun sebanyak 22.162 pasien dan *supply* maksimal standar dalam setahun sebanyak

62.715 pasien. 2) Jumlah *potential demand* dibagi menjadi tiga yaitu *high risk* sebanyak 144.783 wanita, *middle risk* sebanyak 3.913 wanita dan *low risk* sebanyak 95.870 wanita 3) Hasil perbandingan *supply* maksimal dan *potential demand* menunjukkan bahwa jumlah *potential demand* kelompok *high risk* lebih besar daripada jumlah *supply* maksimal riil dan potensial. Jumlah *supply* maksimal lebih kecil dibandingkan jumlah *potential demand* setelah dilakukan prioritas terhadap kelompok *high risk* 4) Formula penetapan target berdasarkan kriteria jika 80% *supply* maksimal > *potential demand*, jumlah target yang ditetapkan adalah *potential demand* dan jika 80% *supply* maksimal ≤ *potential demand*, jumlah target yang ditetapkan adalah 80% *supply* maksimal.

ABSTRACT

Target Setting for Cervical Examination's Program Based on Measurement of Maximum *Supply* and Potential *Demand* (Case Study on Lumajang District)

Cancer that suffered mostly by women in Indonesia is cervical cancer. In 2013, the prevalence of cervical cancer was 0.8‰. Cervical examination performed as an early detection of cervical cancer. Percentage of women aged 30-59 years old who have done cervical examination as an early detection of cervical cancer is still relatively low. Between years 2015-2017, Primary Health Care in Lumajang District hadn't achieved the target of cervical examination. Some researchs need to be done to determine the correct targeting. Target setting should consider organizational capabilities and program target conditions. The purpose of this research was to give recommendation about target setting formula on cervical screening program based on calculation of maximum supply and potential demand in Lumajang District. This research was a descriptive observational approach with cross sectional research design. The research analysis unit was the district. The source of information in this study were the head of the Primary Health Care, midwife who performs cervical examination and 250 women aged 30-59 years old who had been married. The results showed that 1) The number of real maximum supply in one year were 17,061 patients, maximum potential supply in one year were 22,162 patients and the maximum supply of standard in one year were 62,715 patients. 2) The number of potential demand were divided into three, in to the high risk groups that consist of 144,783 women, the middle risk groups that consist of 3,913 women and the low risk groups that consist of 95,870 women 3) The comparison result between maximum supply and potential demand shows that the number of potential demand for high risk groups were bigger than the number of real maximum and potential supply. Maximum supply were smaller than potential demand after priority was used on high risk group 4) The target setting formula set based on some criterias as follows if 80% of supply maximum > potential demand, the targeted one was potential demand, if 80% of supply maximum < potential demand, the targeted one was the 80% of supply maximum or potential demand. The conclusion of this research is recommendation of target setting of cervical examination program based on calculation of maximum supply and potential demand.

Keyword: target, maximum supply, potential demand, cervical screening

ABSTRAK

Penetapan Target Program Pemeriksaan Leher Rahim Berdasarkan Perhitungan *Supply* Maksimal dan *Potential Demand* (Studi di Kabupaten Lumajang)

Penyakit kanker yang banyak di derita oleh perempuan di Indonesia adalah kanker leher rahim atau kanker serviks. Pada tahun 2013, prevalensi penyakit kanker serviks sebesar 0,8‰. Antara tahun 2015–2017, Puskesmas di Kabupaten Lumajang belum ada yang mencapai target pemeriksaan leher rahim. Tujuan penelitian ini adalah memberikan rekomendasi formula penetapan target pada program pemeriksaan leher rahim berdasarkan perhitungan *supply* maksimal dan *potential demand* di Kabupaten Lumajang. Penelitian ini adalah penelitian dengan pendekatan deskriptif observasional dengan rancangan penelitian cross sectional. Unit analisis penelitian adalah kabupaten. Sumber informasi dalam penelitian ini adalan kepala Puskesmas, bidan pelaksana pemeriksaan leher rahim dan 250 wanita usia 30-59 tahun yang sudah pernah menikah. Hasil penelitian menunjukkan bahwa 1) Jumlah *supply* maksimal riil dalam setahun sebanyak 17.061 pasien, *supply* maksimal potensial dalam setahun sebanyak 22.162 pasien dan supply maksimal potensial standar dalam setahun sebanyak 62.715 pasien; 2) Jumlah *potential demand* dibagi menjadi tiga yaitu *high risk* sebanyak 144.783 wanita, *middle risk* sebanyak 3.913 wanita dan *low risk* sebanyak 95.870 wanita; 3) Hasil perbandingan *supply* maksimal dan *potential demand* menunjukkan bahwa jumlah *potential demand* kelompok *high risk* lebih besar daripada jumlah *supply* maksimal riil dan potensial. Jumlah *supply* maksimal lebih kecil dibandingkan jumlah *potential demand* setelah dilakukan prioritas; 4) formula penetapan target berdasarkan kriteria jika 80% *supply* maksimal > *potential demand* yang dijadikan target adalah *potential demand*, jika 80% *supply* maksimal ≤ *potential demand*, yang dijadikan target adalah salah satu dari 80% *supply* maksimal atau *potential demand*. Kesimpulan dari penelitian ini adalah rekomendasi penetapan target program pemeriksaan leher rahim berdasarkan perhitungan *supply* maksimal dan *potential demand*.

Keyword: target, *supply* maksimal, *potential demand*, pemeriksaan leher rahim